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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/639,677	08/13/2003	Fernando Cuervo	3444-Z	6127
7590 Law Office of Jim Zegeer Suite 108 801 North Pitt Street Alexandria, VA 22314			EXAMINER SURVILLO, OLEG	
			ART UNIT 2142	PAPER NUMBER
			MAIL DATE 08/29/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/639,677

Applicant(s)

CUERVO ET AL.

Examiner

OLEG SURVILLO

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6, 8-14 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8-14 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission dated May 19, 2008 has been entered.

Response to Amendment

2. Claims 1-3, 6, 8-14, and 17-20 remain pending in the application. Claims 1, 9, and 12-14 are currently amended. Claims 4, 5, 7, 15, and 16 are canceled. Claims 17-20 are new.

Response to Arguments

It is noted that at page 7 of the Remarks as filed, Applicants argued that: "*new claims 19 and 20 are independent apparatus and method claims that recites the creation of virtual PEPs and that the virtual PEPs are given information to contact the PDP*". It is not understood whether this argument implies that claims 19 and 20 are directed to an invention distinct from and independent of the invention of claims 1 and 9, that would necessitate a restriction requirement. If Applicants believe that claims 19 and 20 are directed towards the same invention, Applicants are requested to avoid, in future

responses, using claim language that raises issues as to whether all claims are directed towards the same invention.

Regarding the rejection of claims 1, 3-7, 9, and 10 under 35 U.S.C. 102(e) as being anticipated by Law, Applicant's arguments have been fully considered but they are not persuasive unless noted otherwise. As to claim 1, Applicants argued that: *"the Law publication does not teach that the NRC and RPL/PDP are separate entities, with the NRC initiating contact between a PEP and an appropriate PDP depending on what service is requested, as recited in claims 1 and 9"*. This argument is not persuasive because Law clearly shows these limitations, as discussed in the last Office action. Applicants further argued that: *"Law does not disclose or suggest that, when a service is a second domain is requested, the NRC sends the request to a second NRC in the second domain, causes a PEP in the second domain to contact the PDP in the first domain, thereby enabling cross-domain control of the PEP, as also recited in claims 1 and 9"*. This argument is persuasive. Applicants still further argued that: *"Law publication does not disclose or suggest the creation of virtual PEPs to enable contact with the PDPs based on information provided by the virtual PEPs, as recited in claims 19 and 20"*. This argument is persuasive. In response to Applicant's argument that: *"instead, the Law publication disclose an NRC 208 that acts as an intermediary between the PDP 210 and the PDP 212, with no direct contact between the PDP and PEP"*, it is noted that none of claims 1, 9, 19, and 20 have the limitation of the PDP being in direct

contact with the PEP. Therefore, Applicant's argument is directed towards the unclaimed feature of the invention.

As to claims 19 and 20, Applicants argued that: *"even if the virtual routers of Gibson could be considered PEPs, they do not have the same flexibility management capabilities as the claimed virtual PEPs, which are created upon request by the NRC for a particular service, at which time the virtual PEPs are provided with information to contact an appropriate PDP and receive the corresponding management information"*. This argument is persuasive.

As to any arguments not specifically addressed, they are the same as discussed above.

Specification

3. The specification is objected to under 37 CFR 1.75(d)(1) as failing to provide a clear support or antecedent basis in the description for newly presented and amended claims, as discussed below with respect to the written description requirement.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-3, 6, 8-14, and 17-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject

matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

In particular, the newly added limitations of claim 1 (and substantially claim 9) read: “... said first resource policy layer including at least one first policy description protocol (PDP), wherein said first NRC initiates association between said first PEP and said at least one first PDP, and said first PDP provides said first PEP with a policy upon establishment of said association between said first PEP and first PDP, and wherein when said first NRC requires resources from a second domain outside the first domain, said first NRC signals a request to a second said NRC in said second domain, which initiates association between a second said PEP in said second domain and said first PDP, said first PDP providing said second PEP with a policy upon establishment of said association between said second PEP and said first PDP” (emphasis added).

Regarding the newly added limitations of claims 1 and 9, Applicants argued that: “*claims 1 and 9 have been amended to recite that the network resource controller (NRC) enables contact between the policy enforcement point (PEP) and a policy description protocol (PDP), and further to recite the use of the NRC to enabling control of a second PEP in a second domain by the first PDP in the first domain, as illustrated in Fig. 2 and described for example in paragraph [0017] of the original specification*”. However, the cited paragraph [0017] of the original specification does not provide sufficient support for “*the use of the NRC to enabling control of a second PEP in a second domain by the first PDP in the first domain*”. Out of all the newly added limitations, as to claims 1 and

9, paragraph [0017] provides a clear support only for the limitation of *"wherein when said first NRC requires resources from a second domain outside the first domain, said first NRC signals a request to a second said NRC in said second domain"*. See par. [0017] lines 16-17.

As a result, claims 1 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Dependent claims 2, 3, 6, 8, 10-14, 17, and 18 are rejected under 35 U.S.C. 112, first paragraph, as being dependent from corresponding independent claims, as discussed above.

If Applicants believe that newly added limitations of claims 1 and 9 are fully supported by the original specification, in their next response the Applicants are required to provide a clear support for newly added limitations, the citation to relevant portions of the specification being as specific as possible for each limitation. Among other limitations, clear support is required for the limitation of "at least one first policy description protocol (PDP)".

As to claims 17 and 18, Applicants argued that: *"new claims 17 and 18 depend respectively from claims 1 and 9, and recite the manner in which the PEPs are virtual PEPs are created upon request by an NRC for a particular service, as also described, for example, in paragraph [0017] of the original specification"*. Since claims 17 and 18 further define each of the first and second PEPs of claims 1 and 9, clear support for a

broader limitations of "a first PEP" and "a second PEP" being other than virtual PEPs is required in the next response.

As to claims 19 and 20, these claims are rejected for analogous reasons, as discussed per claims 1 and 9. If Applicants believe that the limitations of newly added claims 19 and 20 are fully supported by the original specification, in their next response they are required to provide a clear support for the claimed subject matter, the citation to relevant portions of the specification being as specific as possible for each limitation. Among other limitations, clear support is required for the limitation of "at least one first policy description protocol (PDP)".

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-3, 6, 8-14, and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1, 9, 19, and 20, it is unclear which element of the claimed elements performs the functionality of "establishing services that utilize policy-enabled resources", as disclosed in the preamble. In particular, a first policy enforcement point (PEP) is for identifying policy-enabled resources and allocating resources to services. A first network resource controller (NRC) is for requesting from available resource any resources required to establish a service. A first resource policy layer (RPL) is for provisioning, to

a service being established, the resources allocated to that service (emphasis added).

Thus, none of the first PEP, the first NRC and the first RPL is shown to actually perform "establishing services", as disclosed in the preamble. Therefore, it is unclear how the claimed apparatus and method performs its intended function, being establishing services that utilize policy-enabled resources in a communications network.

As to claims 1 and 9, it is further unclear how "decoupling of policy management from the management of policy-enabled resources", as specified in the "whereby" clause, is achieved in the claimed invention. In particular, it is unclear which of the claimed elements perform the policy management and which of the claimed elements perform the management of policy-enabled resources, such that management of each is "decoupled".

Claims 1 and 9 recites the limitation "at least one first PDP" in the claim body. It is unclear to which one of the at least one first PDP "said first PDP" refers to in the instance when there are multiple first PDPs.

As to claim 3, this claim is contradictory to amended claim 1. In particular, claim 3 further specifies that each of the first PEP, first NRC, and the first RPL may be associated with any of the plurality of domains, wherein claim 1 has already specified that the first NRC is within a first domain, which precludes the first NRC from being in any of the other domains, such as a second domain.

Claim 6 is indefinite because the claim language reads: "a second RPL associated with a different domain than the first PEP", wherein it has not been clearly specified which domain the first PEP is associated with (or belongs to). Thus, claim language fails to particularly point out what is being meant by "a different domain".

As to claim 8, it is unclear which elements recited in claim 1 are being referred to as "entities".

Claim 9 recites the limitation "another domain" in the claim body. It is unclear which domain "another domain" refers to.

As to claim 10, this claim is contradictory to amended claim 9. In particular, claim 10 further specifies that each of the first PEP, first NRC, and the first RPL may be associated with any one of the domains, wherein claim 9 has already specified that the first PEP is within a first domain, which precludes the first PEP from being in any of the other domains, such as a second domain.

As to claim 11, it is unclear whether "a main PEP" is one of the "first and second PEPs" of claim 9, or "a main PEP" is an additional PEP.

As to claims 13 and 14, it is unclear whether "a different domain" in each of these claims is the same "different domain" of claim 12, from which claims 13 and 14 depend on.

As to claims 19 and 20, the limitation of "allocating requested policy-enabled resources to services" is ambiguous because it is unclear whether claimed "services" is referring to "the particular service" recited earlier.

Claim 19 recites the limitation "the PDP" in the claim body. It is unclear to which one of the at least one PDP "the PDP" refers to in the instance when there are multiple PDPs.

Claim 20 recites the limitation of "a service" in the step of provisioning. It is unclear whether "a service" is referring to "the particular service" recited earlier.

8. Claims 17 and 18 recite the limitation of "said particular service" in the claim body. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 1-3, 6, 8, 17, and 19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to claim 1, use of the word "an apparatus" does not inherently mean that the claim is directed to a machine. Only if at least one of the claimed elements of the apparatus is a physical part of the machine can the apparatus be a machine within the meaning of 35 U.S.C. 101.

In the instant case, no physical parts of the apparatus have been claimed. In particular, the apparatus of claim 1 recites a first policy enforcement point (PEP), a first network resource controller (NRC) and a first resource policy layer (RPL), all being functional entities, each performing corresponding function, as evidenced by the specification at paragraph [0017]. Therefore, the apparatus of claim 1 fails to provide at least one physical part of the machine, and is rejected under 35 U.S.C. 101 for failing to fall within a statutory category of the invention as being directed to an apparatus of software per se. Specifically, it is noted that the first policy enforcement point (PEP) is interpreted to comprise a plurality of virtual PEPs, as evidenced by claim 2. Therefore, the first PEP is not a physical part of the apparatus.

As to claims 2, 3, 6, 8, and 17, none of these claims introduce at least one physical part that would make an apparatus of claim 1 statutory under 35 U.S.C. 101. Therefore, these claims are rejected for the same reasons.

As to claim 19, use of the word "an apparatus" does not inherently mean that the claim is directed to a machine. Only if at least one of the claimed elements of the apparatus is a physical part of the machine can the apparatus be a machine within the meaning of 35 U.S.C. 101.

In the instant case, no physical parts of the apparatus have been claimed. In particular, the apparatus of claim 19 recites a first network resource controller (NRC), a virtual first policy enforcement point (PEP), and a resource policy layer (RPL), all being functional entities, each performing corresponding function, as evidenced by the specification at paragraph [0017]. Therefore, the apparatus of claim 19 fails to provide at least one physical part of the machine, and is rejected under 35 U.S.C. 101 for failing to fall within a statutory category of the invention as being directed to an apparatus of software per se.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Williams et al. (US Patent: 7,246,165 B2) discloses the step of creating virtual PEPs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLEG SURVILLO whose telephone number is (571)272-9691. The examiner can normally be reached on M-Th 8:30am - 6:00pm; F 8:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Oleg Survillo

Phone: 571-272-9691

/Andrew Caldwell/
Supervisory Patent Examiner, Art Unit 2142